

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION

JERRY EUBANKS, et al.,)	
)	
Plaintiffs,)	
)	
vs.)	Case No. 05-CV-1361 JCH
)	
COTTRELL, INC.)	
)	
Defendant.)	

ORDER

The matters are before the Court on Plaintiffs' Motion to Exclude Defendant's Expert Dr. Bain (Doc. No. 47), filed October 20, 2006 and Plaintiffs' Motion to Bar Defendant's Expert Sandra Metzler (Doc. No. 53), filed October 23, 2006. The matters are fully briefed and ready for disposition.

BACKGROUND

Plaintiff Jerry Eubanks ("Eubanks") injured his back on January 29, 2002 while trying to manipulate the rear loading skids¹ on the car hauler he operated.² (Compl., Doc. No. 1 ¶ 3). Eubanks alleges that the skids on the car hauler jammed and caused his injury. (Mot. to Bar, Doc. No. 53 ¶ 1). Defendant is the manufacturer of the car hauler at issue. (Compl. ¶ 3). Eubanks brought this action³ in Missouri state court against Defendant on August 5, 2005 alleging strict liability,

¹Rear loading skids are ramps or beams that extend and retract from the back of a car hauler so automobiles can drive on and off of it.

²A "car hauler" is a type of trailer used in trucking industry to transport multiple automobiles.

³Eubanks' wife also brought a loss of consortium claim. (Compl., pg. 7).

negligence, and breach of warranty. (Notice of Removal, Doc. No. 1). Defendant removed on August 25, 2005 on the basis of diversity jurisdiction. (Id.).

DISCUSSION

I. Standard for Daubert Motions

The starting point for analyzing expert testimony is Federal Rule of Evidence 702, which provides in relevant part:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.

Under Eighth Circuit law, “[d]ecisions concerning the admission of expert testimony lie within the broad discretion of the trial court.” Anderson v. Raymond Corp., 340 F.3d 520, 523 (8th Cir. 2003) (internal quotations and citation omitted). As a preliminary matter, “[t]he proponent of the expert testimony must prove its admissibility by a preponderance of the evidence.” Sappington v. Skyjack Inc., 446 F. Supp. 2d 1059, 1061 (W.D. Mo. 2006) (quoting Lauzon v. Senco Prods., Inc., 270 F.3d 681, 686 (8th Cir. 2001)). Furthermore, “a review of the case law ... shows that rejection of the expert testimony is the exception rather than the rule.” Robinson v. GEICO Gen. Ins. Co., 447 F.3d 1096, 1101 (8th Cir. 2006) (quoting Fed. R. Evid. 702 Advisory Committee’s Notes). The Court should not, however, admit evidence that is “connected to existing data only by the ipse dixit of the expert.” Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997).

Pursuant to Daubert v. Merrell Dow Pharmaceuticals, Inc., the seminal case regarding expert opinion testimony, “district courts are to perform a ‘gatekeeping’ function and insure that proffered expert testimony is both relevant and reliable.” Dancy v. Hyster Co., 127 F.3d 649, (8th Cir. 1997)

(citations omitted), cert. denied, 523 U.S. 1004 (1998); see also Daubert, 509 U.S. at 592-93.⁴

Daubert provides a number of nonexclusive factors a court can apply in performing this role: 1) whether the theory or technique can be (and has been) tested; 2) whether the theory or technique has been subjected to peer review and publication; 3) the known or potential rate of error; and 4) whether the theory has been generally accepted...Daubert's progeny provides additional factors such as: whether the expertise was developed for litigation or naturally flowed from the expert's research; whether the proposed expert ruled out other alternative explanations; and whether the proposed expert sufficiently connected the proposed testimony with the facts of the case.

Sappington, 446 F. Supp. 2d at 1062,(quoting Lauzon, 270 F.3d at 686-87 (internal quotations and citations omitted)).

II. Dr. Sandra Metzler

Defendant seeks to offer the expert testimony of Dr. Sandra Metzler ("Metzler"). In her expert report, Metzler states that the design of Defendant's skids was reasonably safe and not defective.⁵ (Memo. in Supp. of Mot. to Bar, Doc. No. 54, attached Ex. A, Metzler Expert Report, pg. 4). Plaintiffs argue⁶ that Metzler's methodology is not reliable and her testimony is irrelevant because it does not discuss the amount of force exerted when a skid jams.

Metzler described her testing of the Cottrell skids design as follows:

⁴ "Although the Supreme Court's decision in Daubert involved 'scientific' evidence, the Eighth Circuit has similarly applied the teachings of Daubert to cases involving expert testimony from engineers--seemingly involving 'technical or other specialized knowledge.'" Pillow v. Gen. Motors Corp., 184 F.R.D. 304, 306 (E.D. Mo. 1998) (citations omitted).

⁵In her report, Metzler also analyses the accident itself and Eubanks' medical history. (Metzler Expert Report, pg. 4-6). Plaintiffs have failed to provide the Court with any meaningful briefing on these topics. Thus, these issues are not presently before the Court.

⁶Plaintiffs' initially argued the Court should disqualify her for failure to comply with Federal Rule of Civil Procedure 26(a)(2)(B); however, they appear to have abandoned this argument. (Memo. in Supp., Doc. No. 54 pg. 1; Reply, Doc. No. 66). Even if Plaintiffs had not abandoned this argument, it is without merit.

Occupational injury can result from a sudden impact or from overexertion during a manual task. In the biomechanics⁷ community, one goal when designing manual handling tasks is to design them such that 75% or more of the female work population is capable of performing the task. ...

The biomechanical analysis performed on the process of extending and retracting the skids on a Cottrell trailer utilized a three-dimensional (3-D) motion capture system produced by Motion Analysis Corporation to capture the motion through the process, as well as a synchronized capture of the forces applied to the tie-down bar. The forces were measured via a calibrated, strain-gauged tie-down bar and input into the motion capture system. The body posture and applied forces were then input into the University of Michigan Center for Ergonomics 3-D Static Strength Predictor software, which calculates the resulting joint loads and determines the percentage of the population (male or female) capable of producing the necessary forces, as well as determining lower back compression forces. Additionally, the same biomechanical analysis was performed on the everyday tasks of pulling a lawn mower starter cord, and loading a bag of dog food, a case of 24 bottles, and a 30-pack case of drinks into a shopping cart, for comparison purposes. The software, hardware, and methods used to perform these analyses are all well known and widely accepted in the biomechanical and ergonomics communities and have been utilized by a number of peer-reviewed publications.(see [www.engin.umich.edu/dept/ioe/3DSSP/references .html](http://www.engin.umich.edu/dept/ioe/3DSSP/references.html)).

The forces necessary to extend and retract the skids ranged from 15 to 30 pounds. The results ... show that more than 75% of the female work population is capable of performing both these tasks. Therefore, the process of extending and retracting the rear skids on the Cottrell trailer affords excellent protection against overexertion injuries. ... Based on accepted biomechanical criteria, the method used to extend and retract the rear skids on the Cottrell trailer is reasonably safe. Therefore, the Cottrell trailer design is reasonably safe and not defective.

Several of the posture and external force combinations of the everyday tasks, however, fell below the 75% female population capability levels. Specifically, the pulling of a lawnmower starter cord, loading a large (40-lbs) bag of dog food, and loading a 30-pack case of drinks into a shopping cart each required posture and force combinations that were below this level. This further illustrates the relative safety of the Cottrell trailer design, as the process of properly securing a trailer is less likely to cause injury than a number of everyday tasks.

(Metzler Expert Report pg. 3-4). Plaintiffs contends that the methodology is unreliable because this

⁷Biomechanics is “the science of applying the principles of engineering mechanics to biological systems.” (Metzler Expert Report pg. 3).

test was not done on an actual Cottrell trailer, the methodology is unique to the litigation,⁸ and she knows nothing about the industry. (Memo. in Supp., Doc. No. 54 pg. 2-5).

Upon consideration, the Court finds that Metzler's proposed testimony about the safety of the skids design meets the broad reliability standards imposed by Daubert and its progeny. Metzler earned her Doctor of Science in Mechanical and Biomedical Engineering from Washington University, a respected institution. (Memo in Opp'n., Doc. No. 60 Ex. E). The motion capture system, employed by Metzler, is a generally accepted methodology in the field of ergonomics and biomechanical engineering. (See Response, Doc. No. 60 pg. 6 fn. 5)⁹. Metzler is in the process of presenting a paper discussing her use of this methodology to examine the biomechanics of tightening ratchets on car haulers. (Id. at Ex. G, H).¹⁰ Metzler's interest in motion capture as applied to biomechanics appears to have flowed naturally from her interests in software and engineering, which is apparent on the face of her resume. (Id. at Ex. E). Finally, Plaintiffs' arguments about the factual basis of Metzler's opinion goes to the credibility, not the admissibility, of her testimony and Plaintiffs may raise it on cross examination if they so desire. See Robinson, 447 F.3d at 1100-01.

The Court also disagrees with Plaintiffs' argument that Metzler's report is not relevant because she examined a new trailer, did not test jammed skids, and has not talked with people who

⁸Plaintiffs' argument focuses on a test conducted for a different litigation that examines the forces at work when skids jam. (Memo. in Supp., Doc. No. 53 pg. 3-6, 10-11). In this test, Metzler used a dolly rod and wood block to simulate the forces produced when a skid jams. (Id. at Ex. C, Metzler's Depo. in Gray v. Cottrell, 4:05-cv-01852 CEJ). The Court is not concerned, however, about Metzler's testimony in another case. Furthermore, Metzler does not mention this test in her report and Defendant concedes that she will not discuss it. (Memo. in Opp'n, Doc. No. 60 pg. 11-12).

⁹In this footnote, Defendant directs the Court to a website run by the University of Michigan that lists scholarly articles and publications where motion capture was used during the research.

¹⁰It is unclear whether or not this paper will be peer-reviewed.

use the skids. (Memo. in Supp., Doc. No. 54 pg. 4, citing Metzler's Depo. in Gray v. Cottrell). It appears, however, that Metzler is not being asked to testify about the effects of skid jamming. Rather she is being called to testify about whether the design is reasonably safe. The pleadings illustrate that this is a relevant issue. Count I of the Complaint alleges that "the rig lacked reasonably safe rear loading skids." (Compl, Doc. No. 1 ¶ 7). Defendant's affirmative defenses allege that the design is reasonably safe and that the skids were either altered or misused. (Ans., Doc. No. 7 pg. 5-6). Metzler's testimony will assist the jury in determining this issue. Thus, the Court will deny Plaintiffs' Motion to Bar.

III. Dr. Charles Bain

Defendant also seeks to offer the expert testimony of Dr. Charles Bain ("Bain"). In his expert report, Bain first discusses Eubanks' medical history and then makes the following findings:

Degenerative disc disease (DDD) finds of disc herniations, protrusions and bulges are the result of a slow degenerative process that usually starts in the third decade of life, and significant number of asymptomatic people will have these findings.

DDD findings have been created experimentally in cadaveric and animal models by repeated loading in various combinations of axial loading, bending and torsion. The mechanism of injury was fatigue damage in the form of small annular tears that proceeded from the nucleus outward through the annulus. Disc protrusions and herniations developed gradually and in some cases the nucleus pulposus eventually extruded. The failures typically occurred progressively over tens of thousands of loading cycles, and did not occur as sudden events.

A review of the biomechanical literature suggests that for almost all modes of loading, disc protrusions and herniations are not the result of a one-time loading event unless bone disruption occurs. Traumatic disc herniations have been produced experimentally by extreme axial loading with hyperflexion. However, Mr. Eubanks did not experience extreme axial loading, hyperflexion or any bone disruption during the subject event. Therefore, no part of his DDD can be attributed to the event. Several authors have opined that the relationship between a traumatic event and the radiographic findings of a disc protrusion or herniation cannot be considered causal.

... [One study] showed that there was no quantitative relationship between thoracolumbar disc space narrowing (a surrogate for degenerative disc disease) and heavy equipment use ... This would imply that Mr. Eubanks, while functioning as a car hauler operator, would not be expected to have an increased risk of lumbar degenerative disc disease.

Back pain and degenerative findings are common in the general population. The occurrence of one without the other is also common. Therefore, when both occur together, to state that pain is the result of degenerative findings is often not the case. Mr. Eubanks' degenerative spine conditions were the result of his his genetic makeup and his repetitive everyday movements over many years, and would not have been made symptomatic or have been aggravated by any one single event.

Mr. Eubanks, as a result of the subject event, most likely experienced a low back strain. As evidenced by his treating physicians' records this improved over time. Mr. Eubanks' lumbar spine DDD and spondylosis were not aggravated or made symptomatic by the subject event.

(Memo. in Supp. of Mot. to Exclude, Doc. No. 48 attached Ex. A, Bain's Expert Report pg. 5-6 (internal citations omitted)). Plaintiffs contend that Bain is not qualified to testify in the fields of biomechanical engineering and orthopedic, rheumatological, and neurological medicine.¹¹ (Memo. in Supp., Doc. No. 48 pg. 1). Plaintiffs argue Bain cannot testify on biomechanics because he has no expertise in car haulers. (Id. at pg. 2). Plaintiffs argue that Bain's background does not qualify him to testify on back injuries because he received his medical education outside the United States and his expertise is in family and emergency medicine. (Id. at pg. 3-4). Finally, Plaintiffs assert his opinion is unreliable because it is based on an examination of Eubanks' medical records. (Id. at pg. 12).

Upon consideration, the Court will not disqualify Bain. First, Plaintiffs' argument is based, in large part, on an overstatement about the topics on which this expert will testify. As Defendant points out, he is not being offered to testify about the design or safety of car haulers. (Memo. in

¹¹Plaintiffs also seek to exclude Bain because his report violates Federal Rule of Civil Procedure 26(a)(2)(B). The Court finds this argument meritless.

Opp'n, Doc. No. 59 pg. 2). He is testifying as a medical causation expert. (Id.). Therefore, the Court will not disqualify him for lacking expertise in an area unrelated to his expert testimony. See Smith v. BMW N. Am. Inc., 308 F.3d 913, 919-20 (8th Cir. 2002).

The Court finds that Bain's credentials qualify him as a medical expert. Bain has the necessary education and experience to meet the requirements of Fed. R. Evid. 702. Dr. Bain earned a Doctor of Medicine from Queens College in Canada. (Memo. in Opp'n, Doc. No. 59 Ex. B, Bain Aff. ¶ 21). He has nineteen years of experience in family and emergency medicine. (Id. at ¶ 22-23). He treated and advised patients on neurological, orthopedic, and rheumatological issues. (Id. at ¶ 23). Although he no longer actively practices medicine, he is licensed to do so in Texas. (Id. at pg. 29). Plaintiffs' concerns with his lack of specialization in neurological, orthopedic, and rheumatological issues goes to credibility and is an appropriate subject for cross-examination. See Robinson, 447 F.3d at 1100-01.

The Court also finds that Bain's testimony appears sufficiently reliable. There is no indication that the theories he employs are not generally accepted in the medical community. He applied these medical theories to the facts of the case, which will assist the jury in determining the cause of Eubanks' injury. See Clark ex rel. Clark v. Heidrick, 150F.3d 912, 915 (8th Cir. 1998) (stating that expert who can offer global understanding of possible causes of injury or who can provide an alternative theory of causation is useful to a jury). Finally, his opinion, based solely on a review of Eubanks' medical records, is not "so fundamentally unsound that it can offer no assistance to the jury." Larson v. Kemper, 414 F.3d 936, 941 (8th Cir. 2005).

CONCLUSION

Accordingly,

IT IS HEREBY ORDERED that Plaintiffs' Motion to Exclude Defendant's Expert Dr. Bain

(Doc. No. 47) is **DENIED**.

IT IS FURTHER ORDERED that Plaintiffs' Motion to Bar Defendant's Expert Sandra Metzler (Doc. No. 53) is **DENIED**.

Dated this 19th day of January, 2007.

/s/ Jean C. Hamilton
UNITED STATES DISTRICT JUDGE